

To understand *Luminosity*, you must understand that she is built to be lived on. The phrase a "villa on water" has been worn thin in superyacht marketing but it really seems true in this case, in both the architectural aesthetic and the raison d'être of this 107.6-metre Benetti. She's designed entirely from the inside out – no compromise was made in creating the spacious, light-flooded interiors – the "glass palace" as the Tuscan yard puts it, with a dash of originality.

Luminosity is the second of three 100m+ superyachts launched by Benetti over just four months from December 2018. Because of a crystal-clear and unusual brief, the project was well developed before it got anywhere near a shipyard: Zaniz Jakubowski of interiors studio Zaniz was involved from inception because of the primacy of the interior layout and lifestyle. Azure Yacht Design & Naval Architecture was engaged for its expertise in glass and hybrid propulsion and worked to create an exterior look that would wrap that interior in straight-lined, masculine style. Jakubowski refined the exterior further, as did Reymond Langton, who added "details that suited the volume of the boat, like chamfers which break up surfaces by angling the light", says Andrew Langton. Burgess's New Construction department worked on Passenger Yacht Code (PYC) compliance, specification, design and development, and acted as client rep and technical manager throughout the project as it grew by around 20 metres. When the contract with Benetti was signed in 2014, the yard brought on designer Giorgio Cassetta to polish the exterior. So far so complicated? Closing the circle was Jakubowski, in it from the start, who finalised the design inside and out.

And inside was key. On a basic level, she says, "The profile of the yacht was always going to be influenced by the requirements for the deck heights."

"On the main deck we have a roomy three metres," adds Hugo van Wieringen, director of Azure. "You get used to it and then if you go back on a normal boat with 2.3-metre headroom you really feel the ceiling is coming down on you." Cassetta notes that the yacht is as tall as the Fincantieri *Serene*, which has one more deck and is 26 metres longer.

And then there's the glass. "These are some of the biggest glazed surfaces ever built on a yacht," says Michele Bechelli, project manager at Benetti,

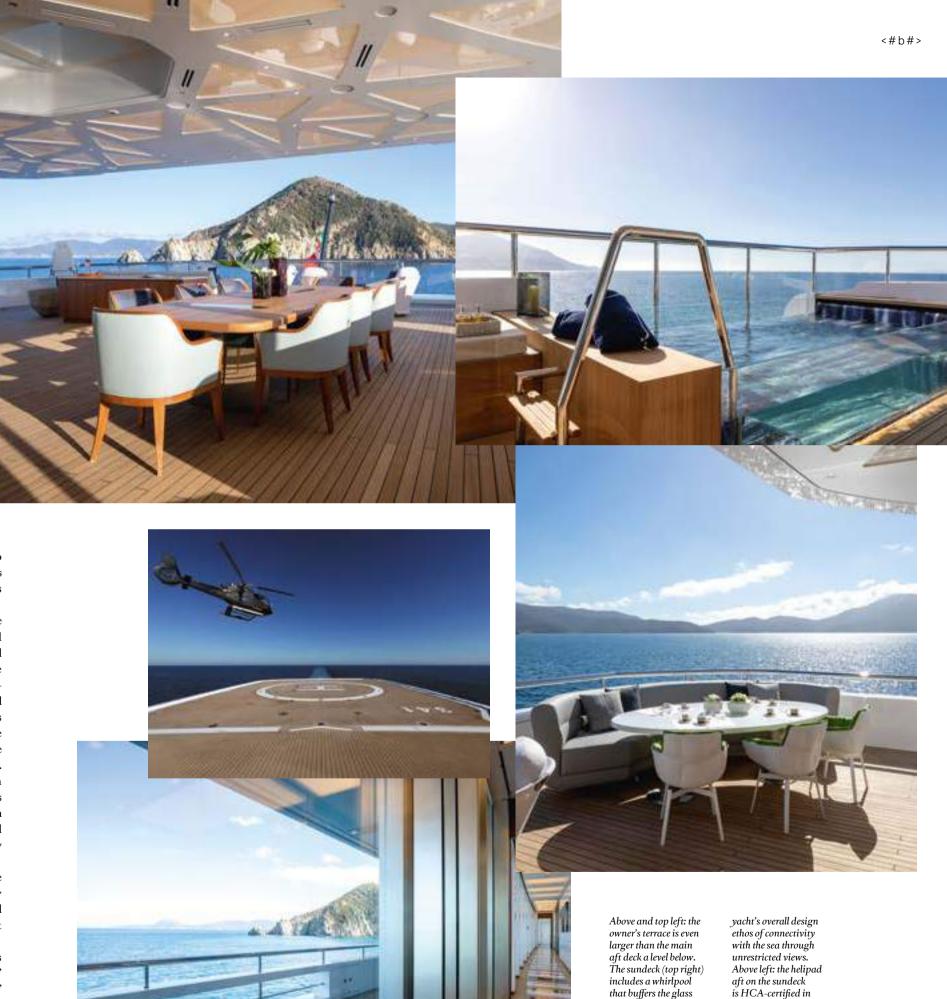
referring to the yacht's 800 square metres of windows. They were vital in establishing the right atmosphere: "The concept of these spaces was to feel at one with the sea, open to the ocean," says Jakubowski. There was talk of structural glass, but it wasn't practical. Instead, Luminosity boasts floor-to-ceiling windows on multiple decks. Fire-rated for PYC certification, they are seven centimetres thick, optically perfect and contain no tint, so there is as little as possible between the eye and the seascape. They're also huge - 2.5 metres by 3.1 metres on the main deck. "At the time of its conception this was something that was not commonplace, and the glass had to be developed from scratch," says Sean Bianchi, head of new construction at Burgess. "The size and weight of each pane was a consideration but

ensuring that the fire rating of the glass met the rule requirements also threw up a number of other challenges." That meant testing at 600 degrees centigrade. And then there were the logistics to ensure the precious panes weren't chipped or smashed during transport and installation.

But there's not much point having a cruising lifestyle without the engineering to keep you moving. To this end, Luminosity has an advanced system comprising six 1,000kW generators that power two Azipods as well as the hotel services on board. Spare electricity produced is used to charge 36 tonnes of batteries - the largest battery pack of any yacht afloat offering up to 12 hours of quiet, vibration-free navigation without the need to start the generators. They also help to smooth the peak loading requests from onboard systems, compensating for the reaction times of the generators and dramatically reducing fuel consumption. Below the waterline sit a pair of forward-facing Azipods driven by electric motors. Because they're forward-facing, undisturbed water meets the props at an angle that increases their efficiency, thus reducing power requirements for a given speed compared to a typical shaft set-up. According to van Wieringen, this diesel-electric power package is particularly well-suited for Luminosity's designed cruising speed, reducing fuel consumption by as much as 10 to 20 per cent.

Honing this efficiency further is a straight bow, which both suited the yacht's angular styling and increased the waterline length, thereby reducing wave-making resistance. Combined with vast fuel tanks, all this gives *Luminosity* a range of more than 8,000 nautical miles at cruising speed.

And there's fuel for people too: stores vast enough for eight months of provisions; a galley "better than many Michelin-star restaurants," says Cassetta; crew cabins "laid out to maximise personal space," according to Jakubowski; service areas such as the laundry "comparable with much bigger vessels," claims Bianchi; and a hospital room and



railing for perfect sea

views, which follows the

accordance with the

Passenger Yacht Code

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doctor's cabin in case of emergencies. There is also a vast owner's deck, with the facilities to live privately and work for extended periods of time. For getting in and out of remote locations quickly, there's both a foredeck touch-and-go helipad and a fully certified helideck up-top with a 13.7-metre D-Value, big enough to carry a seven-person Bell 429, as well as an onboard refuelling system and approximately seven cubic metres of At jet fuel. For exploring, there is a wealth of tenders available, some stored up by the helipad. "At the foundation of the mast we have two cranes," says Bechelli. "You can load any kind of toys or tenders - the dimensions of those cranes are designed to load and unload the weight of a Rolls-Royce Phantom - we are talking about 3.5 tonnes of weight." Where are you going to unload it to? Well down on the lower deck, the sideopening tender garage is almost four metres tall to allow for support boats. "One of them is a landing craft that allows you to land your Rolls-Royce on a beach," says Cassetta. If you're visiting Patagonia rather than the Côte D'Azur, the Roller could of course be swapped out for a 4x4.

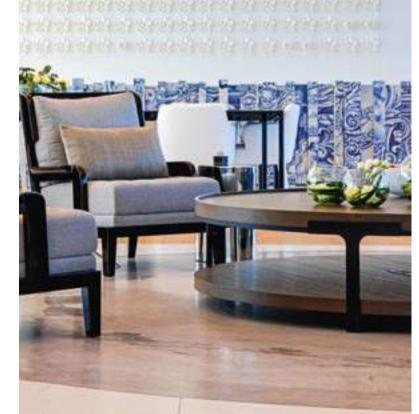
For spending a long time at sea, you also need boundless tech to keep you connected. "The yacht is a combination of contemporary simplicity and the highest and most advanced technology," says Bechelli, "everything is hidden behind a clean and tidy scheme." There are two 3.5-metre satellite dishes to ensure a signal anywhere in the world, Cat 8 super-fast broadband

and two rack rooms to serve the 74 televisions on board. There are 500 kilometres of cable on the yacht.

In terms of interior design and style, the requirement to spend long periods aboard dictated the approach. The idea, says Jakubowski, "was to have different experiences in different areas of the boat," and in a similar vein, the decor is both loaded with meaning to delight, and designed to change and reflect the natural world outside – ever-present through those massive windows. The idea is that it won't feel stale after months of non-stop cruising.

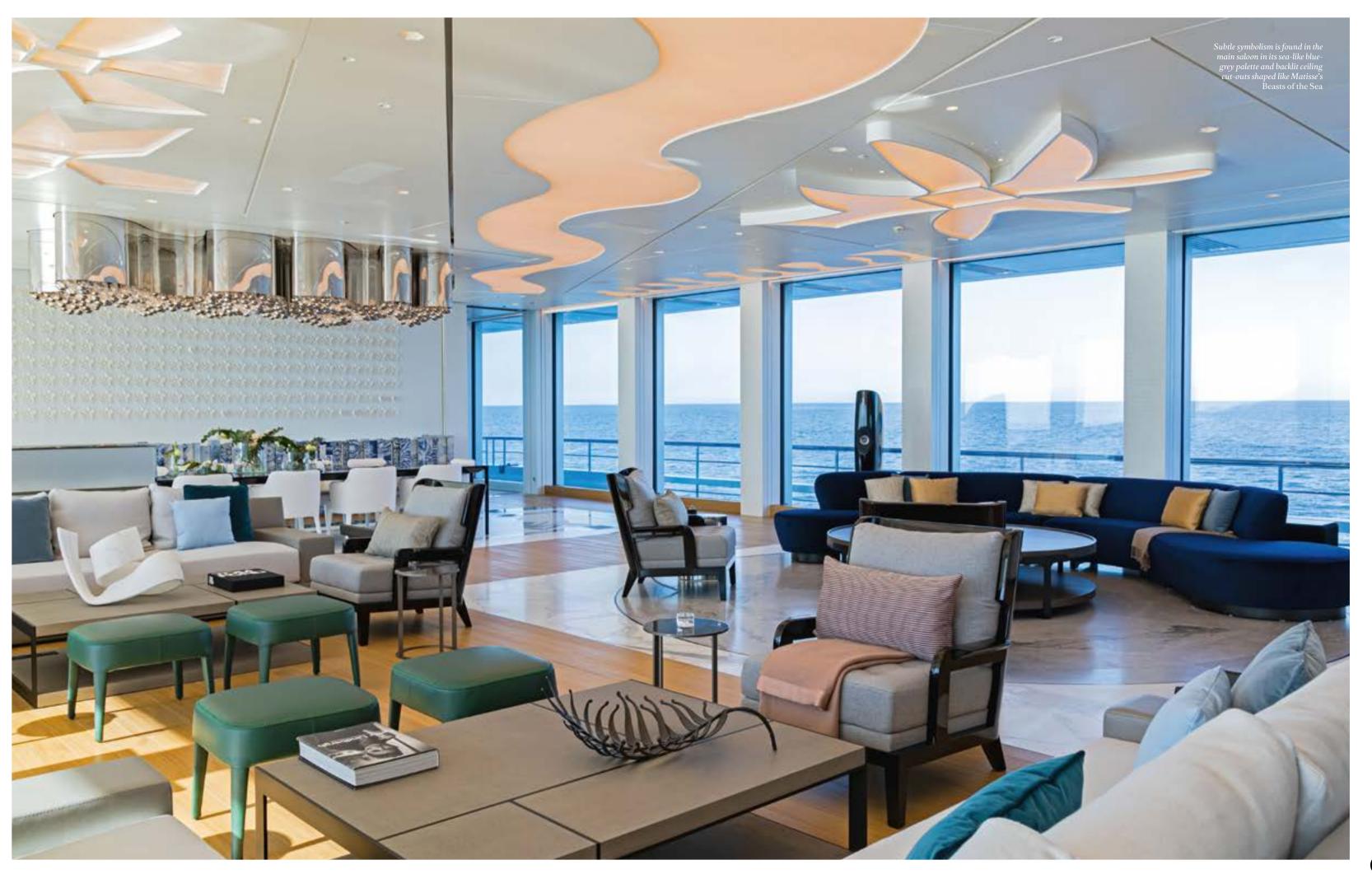
"I created a timeline and an art line," says Jakubowski. "The timeline was a guide through major historical and social events from the 1920s to 2010; the art line movements were a result of the social economic conditions of their time."

The main saloon is certainly replete with symbolism. A palette of sea blue and a neutral grey – to denote the crest of a wave – is reflected in natural fabrics such as cashmere, linen, cotton velvet and leather. Between the huge windows, the mullions are engraved with words from Melville's *Moby Dick* "to provide the ocean connection, when you're standing inside". Ceiling cut-outs are backlit to resemble Matisse's *Beasts of the Sea*, and the blue de Savoie marble inlay on a five-metre rotating seating platform is shaped to reference a Liechtenstein speech bubble. A 7.5-metre buffet





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console in the dining area is clad in blue and white Portuguese majolica tiles to reference "the adventures of the world's greatest seafaring explorers". Beneath a custom carbon fibre dining table, which can be expanded to seat 28, a "semi-precious marble carpet" is inlaid with abstract sea creatures, while above is an eye-popping light feature. The incandescent bulbs are lit with fibre optics (to denote the marriage of antique and modern technologies) each fixed securely to a steel rod, and the whole cluster wrapped in mirror-polished stainless steel. "You get the reflection from outside on that chandelier," says Jakubowski. "If there is a sunset, the room changes colour."

Taking the idea of constant change to extremes is an artwork on the forward wall designed by Jakubowski. 264 Flowers in Motion is just that: a wall of Corian magnolia blooms that open and close according to a variety of pre-set programmes, or as you move in front of it, when on the motion-sensor setting.

Down in the 250-square-metre beach club, complete with sauna, Turkish bath and a huge gym, the space opens via port and starboard shell doors. The task here was to "zone" the vast space into different areas. To this end, the pool area is punctuated with a custom chandelier inspired by a diamond: "When you look at the water and the sun is shining, it looks like millions of diamonds," says Jakubowski by way of explanation. The pool is clad in mirror-polished stainless steel which is faceted to reflect the surroundings and blur the boundary between the pool and the seascape. The accompanying 4°C plunge pool, meanwhile, is clad with mirror-backed acrylic "ice cubes" and accessorised with an acrylic ice sculpture-you can't say you weren't warned. To one side of this space there's a cinema screen and to the other a cosy seating space with a huge television.

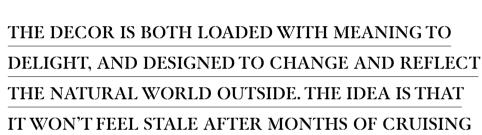
There's more reflection in the bar area's faux skylight. "We couldn't put much height into it because there are cables running there, but we faceted this mirror," says Jakubowski. Referring to the theme of change, a Damien Hirst lenticular backs the bar, appearing to move as you pass by – and the bar itself is a bit of a transformer. "If you've got children on board and it's daytime, you're going to be treating the space differently than if you're having a party," says Jakubowski. The space behind the bar can therefore function as simply a clean work surface or press a button and clear holders pop up, revealing bottles in spectacular style.

At the aft end of the space, an intimate dining table sits in its own nook a few steps from the water. Above is a faceted skylight – real this time – and below, anti-slip glass is illuminated with tube lighting. Here, the beach club's wall treatment is most on show, undulating to dampen sound, with a palette designed to evoke the 1960s in Saint-Tropez, "Those multicoloured beach cabanas," says Jakubowski.

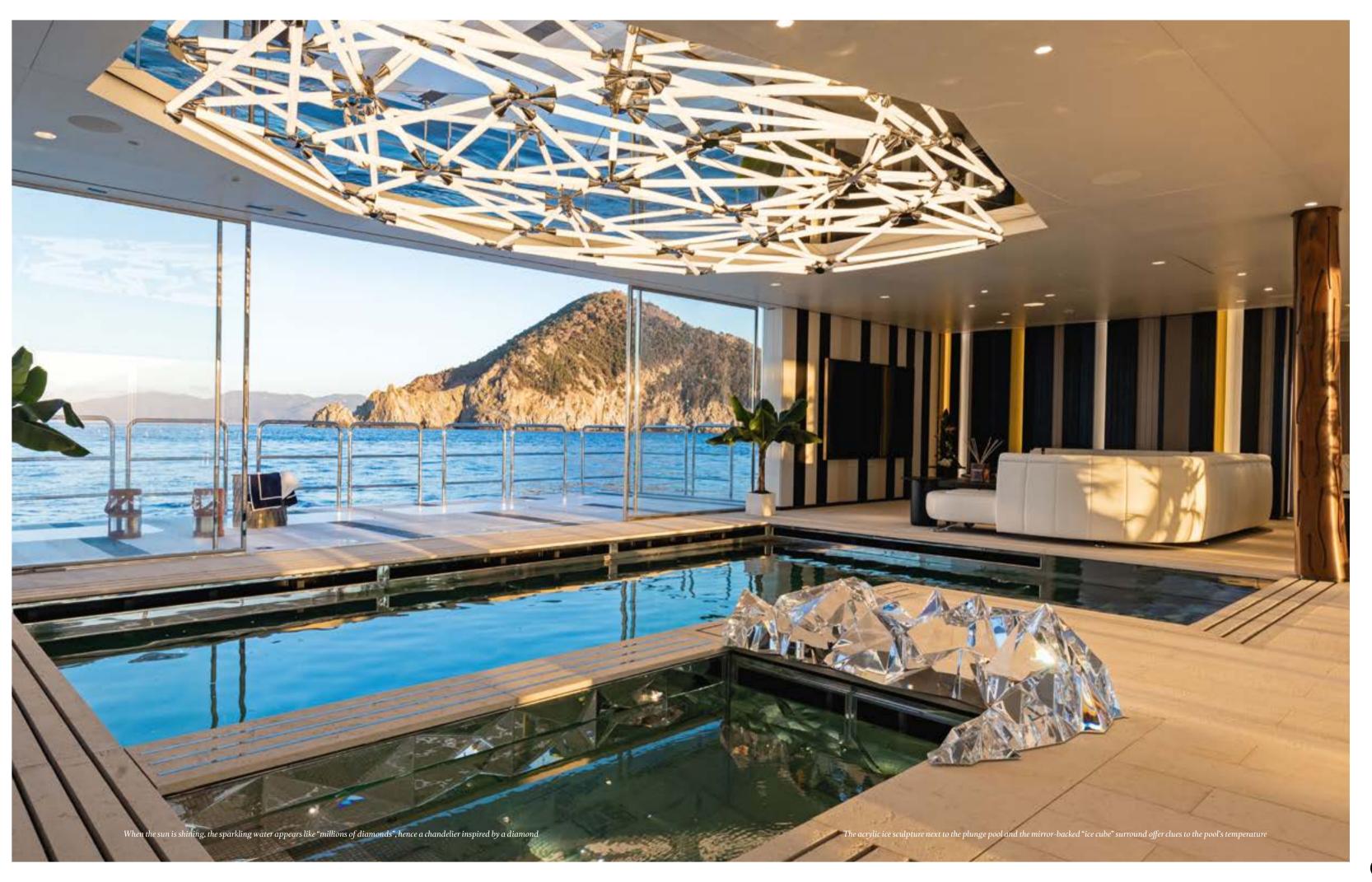
The four guest cabins on the main deck are no less glamorous, with materials ranging from gold leaf to onyx and – less conventionally – brushed cement and ceramics. Two feature contemporary fireplaces. The bridge

Right and far right: shell doors open on both sides of the beach club to create a terrace on the water outside the gym and pool. Farther aft in the beach club is a bar featuring a Damien Hirst lenticular (top right) and dining area (top left). A faceted mirror above the bar mimics the look of the skylight fixed above the dining table









SHOWSTOPPING STAIRWELL

A forest wall on a world-roaming superyacht? Yes, it would be as much of a logistical and maintenance nightmare as it sounds. Which is why after considering it, the creators of *Luminosity* opted for a 21st-century alternative with even more impact. "I wanted to find a way to design a main shaft through all the levels that was not 'static'," says designer Zaniz Jakubowski. "I wanted a feeling of expansion, as if you were travelling through light going through the decks." To this end, the showpiece 18-metre, five-deck stairwell amidships is topped with a skylight and sits alongside a lift that Michele Bechelli describes as "a cube of glass" capable of running at one metre per second. But most noticeably, the stairwell is backed with a vast interactive video wall that spills into the main deck hallway. "I wanted a misty forest of trees where the leaves would move as though there was a slight breeze, and butterflies would follow you,"

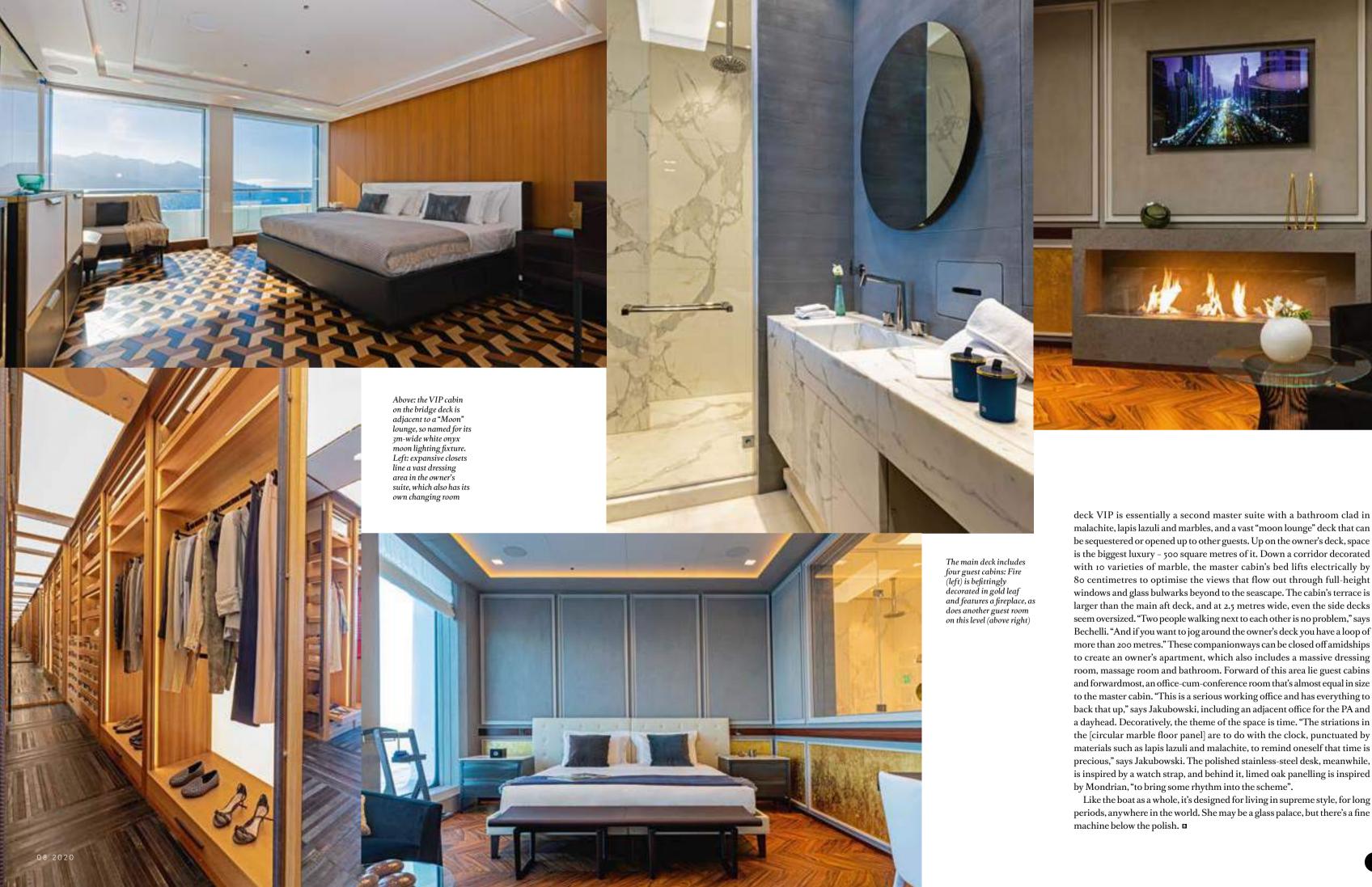
Jakubowski says. Invisible sensors mean they do just that. In line with the ethos of the yacht as a whole it is a biophilic design, in that it "connects the occupant to the natural environment" and the video mirrors the conditions outside, as day becomes night.

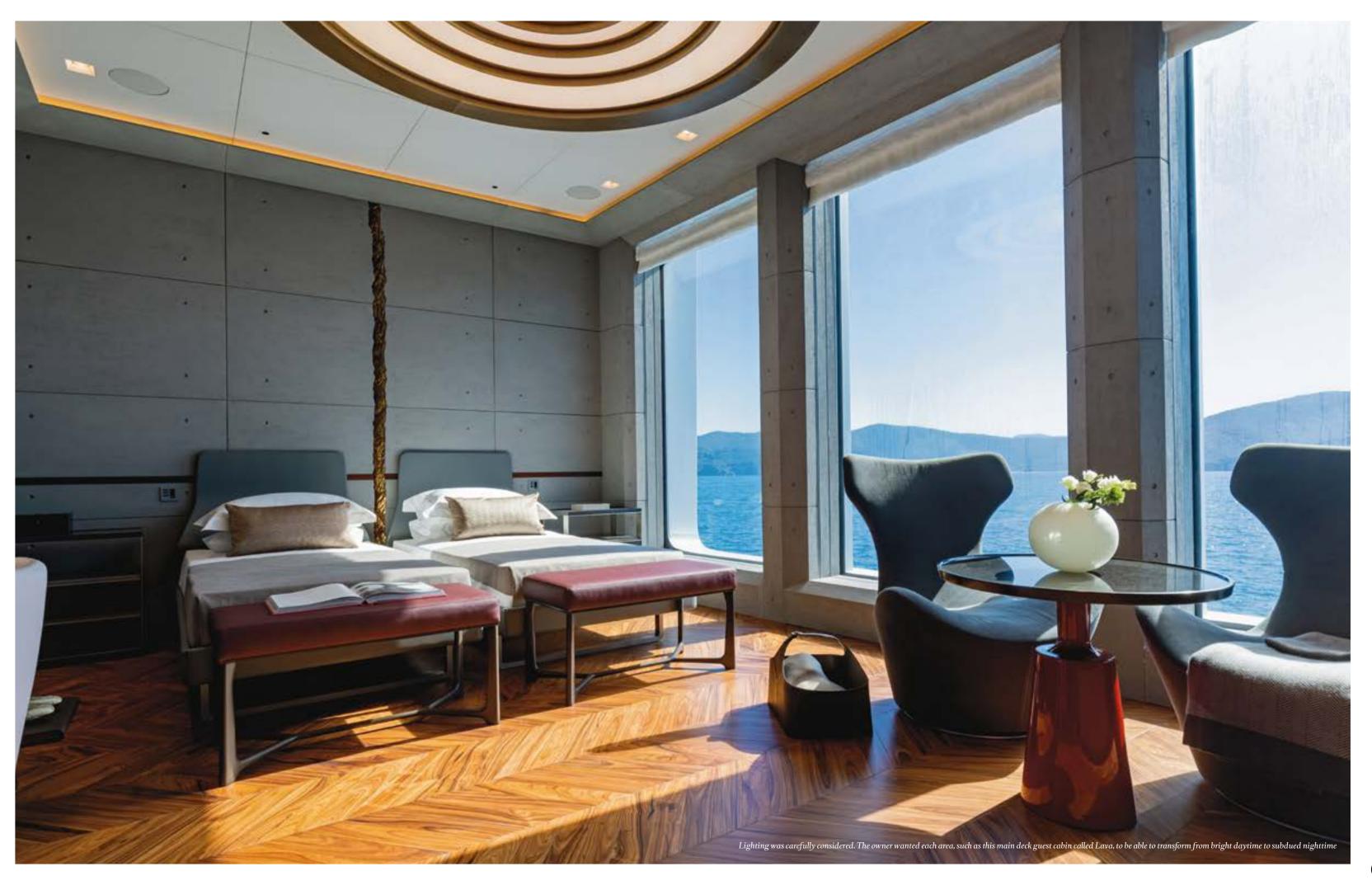
Multiple studies were carried out for noise and vibration, and to create panels thin enough not to impinge on the space. In practical terms, says Bechelli, we're talking about "approximately 270 square metres of very heavy screens, full of technology. The structure is not connected rigidly to the vessel, instead there are strong and resilient mounts to control the lateral movement." Crucially, there's a gap behind the panels with a dedicated ventilation system, able to dissipate the heat produced. "The AC system designed for the panels alone is equivalent to that of a 65-metre motor yacht in terms of capacity," says Bechelli.



One hundred and twelve interactive LED panels line the stairwell, from the lower deck to the sundeck, as well as the main deck corridor (above left)









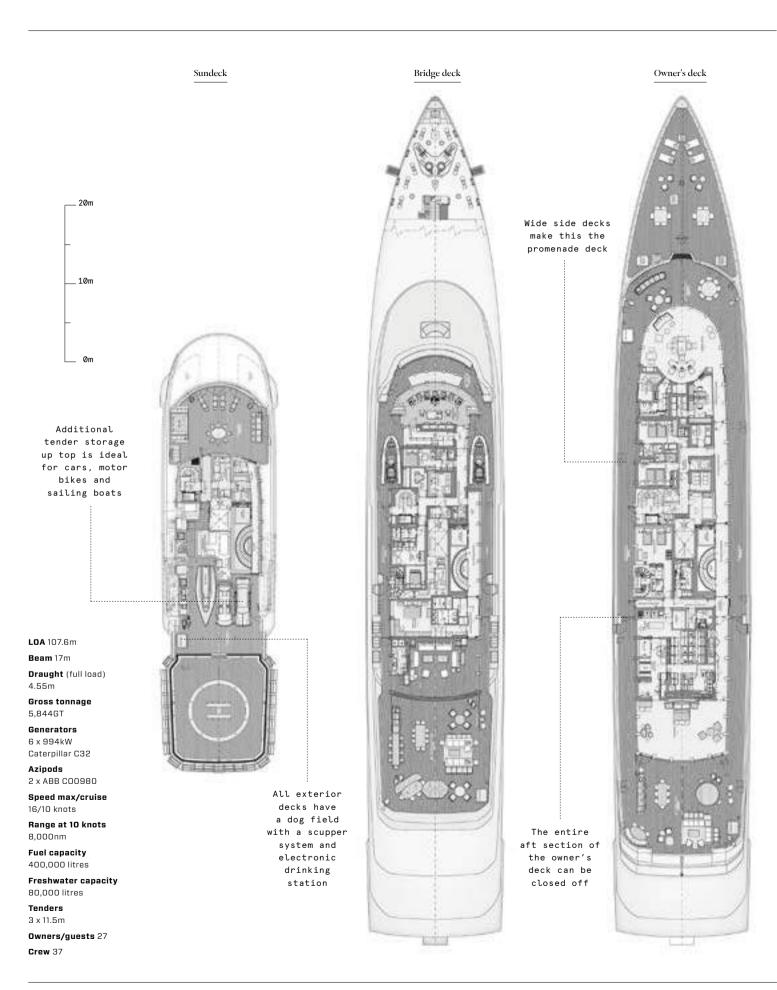


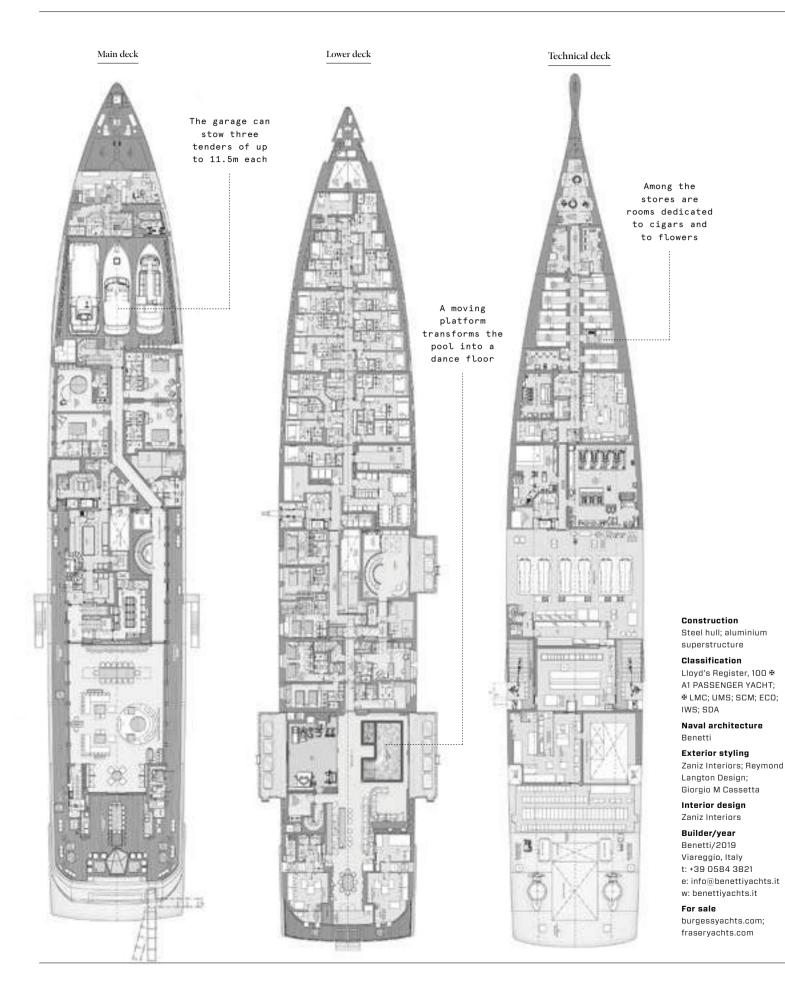
Above: at the opposite end of the deck is a spacious, well-equipped office/conference room. Throughout the yacht, you'll find no carpets, only marble or wood floors inlaid with decorative stone





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BENETTI | <#b#>





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